



GLS 466-007B TRANSLUCENT

Thermoplastic Elastomer

Key Characteristics

Product Description	
GLS 466-007B is an ultra-soft TPE designed for the applications where certain clarity and an extremely soft feel are desired.	
<ul style="list-style-type: none"> • Tactile Feel • Ultra-Soft • Translucent 	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Features	• Medium Clarity • Soft
Uses	• Artificial Skin • Personal Care • Toys • Consumer Applications • Soft Touch Applications • Transparent or Translucent Parts
Agency Ratings	• FDA Unspecified Rating
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	0.850	0.850	ASTM D792
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ^{2, 3} (Break, 73°F (23°C))	102 psi	0.700 MPa	ASTM D412
Tensile Elongation ^{2, 3} (Break, 73°F (23°C))	900 %	900 %	ASTM D412
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore OO, 10 sec)	30	30	ASTM D2240
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity 392°F (200°C), 11200 sec ⁻¹	3.50 Pa·s	3.50 Pa·s	ASTM D3835

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	240 to 300 °F	116 to 149 °C
Middle Temperature	280 to 360 °F	138 to 182 °C
Front Temperature	310 to 370 °F	154 to 188 °C
Nozzle Temperature	320 to 380 °F	160 to 193 °C
Mold Temperature	55.0 to 90.0 °F	12.8 to 32.2 °C
Back Pressure	0.00 to 80.0 psi	0.00 to 0.552 MPa
Screw Speed	15 to 75 rpm	15 to 75 rpm

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Injection Notes

Color concentrates with GLS 466-007B as the carrier are most suitable for coloring this product. If a GLS 466-007B color concentrate carrier is desired, it is important that the chosen color house have underwater pelletization capabilities. Typical loadings for color concentrates are 1% to 5% by weight. Liquid color (pigment, not dye) can be used; white oil carriers are recommended. A high color match consistency can be obtained by using precolored compounds available from GLS. Polypropylene (PP) based color concentrates are not recommended because they lead to poor dispersion and can significantly change the hardness of the material. Concentrates based on PVC should not be used. The final determination of color concentrate suitability should be determined by customer trials.

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).

Regrind levels up to 20% can be used with GLS 466-007B with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.

Drying is not Required

Injection Speed: 0.5 to 2 in/sec
 1st Stage - Boost Pressure: 100 to 400 psi
 2nd Stage - Hold Pressure: 30% of Boost
 Hold Time (Thick Part): 2 to 10 sec
 Hold Time (Thin Part): 1 to 3 sec

Notes

¹ Typical values are not to be construed as specifications.

² Die C

³ 2 hr

CONTACT INFORMATION**Americas**

United States - Avon Lake
 +1 440 930 1000

United States - McHenry
 +1 815 385 8500

Asia

China - Guangzhou
 +86 20 8732 7260

China - Shenzhen
 +86 755 2969 2888

China - Suzhou
 +86 512 6823 24 38

China - Suzhou
 +86 512 6265 2600

Hong Kong -
 +852 2690 5332

Taiwan - Yonghe City,
 +886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
 +49 7225 6802 0

Spain - Barbastró (Huesca)
 +34 974 310 314



Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas

33587 Walker Road
 Avon Lake, Ohio 44012
 United States
 +1 440 930 1000
 +1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
 Z.J Hi-tech Park, Pudong
 Shanghai, 201203, China
 +86 21 5080 1188

PolyOne Europe

6 Giällewee
 +352 269 050 35

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